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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/025,489	12/26/2001	Jun Watanabe	04329.2710	7884

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EXAMINER	
BAYARD, EMMANUEL	
ART UNIT	**PAPER NUMBER**
2631	

DATE MAILED: 06/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/025,489	WATANABE ET AL.	
	Examiner	Art Unit	
	Emmanuel Bayard	2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 26 December 2001.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-12 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-12 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5/9/03.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmidl et al U.S. Pub No 2002/0021746.

As per claims 1 and 8, Schmidl et al teaches a wireless communication method for use in a spread spectrum communication system which performs frequency hopping using a plurality of frequency channels having different carrier frequencies and defined in a specified frequency band, the method comprising: determining the RF signal is the same as the claimed (detecting a carrier) (see paragraphs [0011-0012, 0017] of another wireless communication system that performs a wireless communication by using the specified frequency band (see fig.1); and excluding a frequency channel of the plurality of frequency channels in which the carrier of said another wireless communication system is detected, from frequency channels targeted for the frequency hopping (see paragraphs [0014, 0018, 0020].

As per claim 2, Schmidl et al teaches wherein wireless communication of the spread spectrum communication system is conducted by a master-slave system, the

carrier of said another wireless communication system is detected by a master in the spread spectrum communication system, and said excluding includes notifying a slave of a stop of use of the frequency channel in which the carrier of said another wireless communication system is detected by the master (see paragraphs 0012, 0018-0020]).

As per claim 3, Schmidl et al inherently teaches determining again whether the carrier of said another wireless communication system is present in the frequency channel excluded from the frequency channels targeted for the frequency hopping; and adding the excluded frequency channel to the frequency channels targeted for the frequency hopping when the carrier of said another wireless communication system is not detected.

As per claim 4, Schmidl et al inherently teaches, wherein said another wireless communication system is a spread spectrum-direct sequence communication system, and said detecting includes de-spreading a received radio signal by using a spread code used in said another wireless communication system to detect the carrier of said another wireless communication system.

As per claim 5, Schmidl et al inherently teaches wherein wireless communication of the spread spectrum communication system is conducted by a master-slave system, and the carrier of said another wireless communication system is detected by a master in the spread spectrum communication system, before a radio link is constructed between the master and slave.

As per claim 6, Schmidl et al teaches, wherein said master generates a code indicating a hopping pattern excluding a frequency channel in which the carrier of said

another wireless communication system is detected, and notifies the slave of the code (see paragraphs [0012, 0018-0020]).

As per claim 7, Schmidl et al inherently teaches, wherein said detecting includes executing a carrier sense process to determine whether the carrier of the second wireless communication system is present in each of the plurality of frequency channels.

As per claim 9, Schmidl et al inherently teaches wherein said second wireless communication system is a spread spectrum-direct sequence communication system, and said detecting includes de-spreading a received radio signal using a spread code used in said second wireless communication system to determine whether the carrier of said second wireless communication system is present.

As per claim 10, Schmidl et al inherently teaches wireless communication apparatus of a spread spectrum communication system which performs frequency hopping using a plurality of frequency channels having different frequencies and defined in a specified frequency band, the apparatus comprising: a determining the RF signal is the same as the claimed (detecting unit) (see paragraphs [0011-0012, 0017] to detect a carrier of another wireless communication system that performs a wireless communication by using the specified frequency band (see fig.1); and a excluding unit configured to exclude a frequency channel of the plurality of frequency channels in which the carrier of said another wireless communication system is detected, from frequency channels targeted for the frequency hopping (see paragraphs [0014, 0018, 0020].

As per claim 11, Schmidl et al inherently teaches: a unit which determines again whether the carrier of said another wireless communication system is present in the frequency channel excluded from the frequency channels targeted for the frequency hopping; and a unit which adds the excluded frequency channel to the frequency channels targeted for the frequency hopping when the carrier of said another wireless communication system is not detected.

As per claim 12, Schmidl et al inherently teaches wherein said another wireless communication system is a spread spectrum-direct sequence communication system, and said detecting unit includes a unit which de-spreads a received radio signal by using a spread code used in said another wireless communication system to detect the carrier of said another wireless communication system.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Antonio et al U.S. Patent No 5,917,812 teaches a system and method for reducing interference.

Foster et al U.S. Patent No 5,918,181 teaches a method and apparatus for tracking location of wireless.

Getern et al U.S. Patent No 6,760,319 teaches a fixed frequency interference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Emmanuel Bayard whose telephone number is 571 272

3016. The examiner can normally be reached on Monday-Friday (7:Am-4:30PM) Alternate Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammed Ghayour can be reached on 571 272 3021. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Emmanuel Bayard
Primary Examiner
Art Unit 2631

5/27/05

EMMANUEL BAYARD
PRIMARY EXAMINER